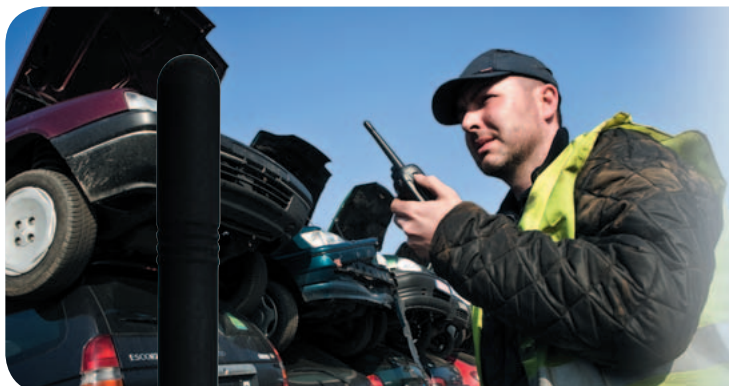


# KENWOOD

Listen to the Future



## TK-2312E/3312E

VHF/UHF FM Portable Radios

5-tone



FleetSync<sup>®</sup> by KENWOOD

The new TK-2312/3312 is slim and compact yet packed with features for intuitive operation, impressive performance, and all-weather reliability. Nine programmable function keys allow for customised convenience, and Kenwood's renowned audio clarity means the message gets through loud and clear.

### PROGRAMMABLE VOICE INVERSION SCRAMBLER\*

The built-in programmable voice inversion scrambler provides protection against casual eavesdropping.

\*This function cannot be used in certain countries. Please contact your Kenwood dealer or further information.

### SIGNALLING

■ QT / DQT / DTMF ■ FleetSync<sup>®</sup> PTT ID, SelCall  
■ 5-tone ■ Built-in MDC-1200 signalling FleetSync<sup>®</sup> and MDC-1200 signalling can be independently selected for each zone. Switching between them is as simple as changing zones.

### EMERGENCY FUNCTION

For hazardous/hostile environments, side PF keys can be programmed for Emergency use to transmit an alert to a predetermined person or group using DTMF, FleetSync<sup>®</sup> or MDC-1200 signalling.

### ROBUST & WATER-RESISTANT

The tough TK-2312/3312 has passed the demanding IP54/55 tests, even with the optional speaker microphone KMC-45 attached (locking bracket required). It also meets or exceeds 11 MIL-STD 810 C/D/E/F/G environmental standards, including "blowing rain".

### CLEAR & CRISP, ENHANCED AUDIO

As an experienced audio specialist, Kenwood has decades of expertise that is reflected in every Kenwood radio – from component selection and construction to optimisation, evaluation and analysis. The resulting audio performance, specially engineered for transceivers, is undeniably clearer and crisper. Just listen to the difference.

### OTHER FEATURES

- Radio stun • Priority scan
- Channel / Zone delete & add • Key lock
- Compressor / VOX / Scrambler setting per channel
- VOX • T.O.T • Busy channel lockout
- Operator-selectable tone • Password protection
- Wireless clone • Self-programming mode
- Talk around • Compatible with TK-2212/3212 batteries

### UHF WIDE BAND COVERAGE

Offering extensive frequency coverage – 70MHz for UHF – the TK-2312/3312 is ideal for a wide range of applications.

### 128 CHANNELS / 128 ZONES

The 128-channel, 128-zone capacity is ample for any current or future requirement in any radio system.

### 5W OUTPUT POWER

Output is 5W for both VHF and UHF.

### GPS CONNECTIVITY

Combined with the optional KMC-48GPS Speaker Mic, the TK-2312/3312 can function as a mobile station for Kenwood's AVL system.

### 9 PF KEYS

9 programmable functions keys (7 in the front and 2 on the side) allow operation to be customised to fit specific requirements.

### EASY OPERATION

Seven frontal PF keys provide easy one-touch operation. And the 8-character, 13-segment backlit LCD with icons – including a new RSSI display – makes channel information or FleetSync<sup>®</sup> messaging easy to read, day or night.

### 4-COLOUR LED INDICATORS

In addition to the red/orange/green LED indicators, a blue LED has been added for quick visual confirmation.



## Options

<ul style="list-style-type: none"> <li>■ <b>KNB-45L</b> Li-Ion Battery Pack (2,000 mAh)</li> <li>■ <b>KNB-53N</b> Ni-MH Battery Pack (1,400 mAh)</li> <li>■ <b>KNB-29N</b> Ni-MH Battery Pack (1,500mAh)</li> <li>■ <b>KSC-31</b> Charger for KNB-53N/29N</li> <li>■ <b>KSC-35</b> Rapid Charger for KNB-45L</li> <li>■ <b>KSC-316/356</b> 6 Pocket Multiple Charge</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>KRA-22/23</b> VHF/UHF Low Profile Helical Antenna</li> <li>■ <b>KRA-26/27</b> VHF Helical Antenna/ UHF Whip Antenna</li> <li>■ <b>KMC-48GPS</b> GPS Speaker Microphone</li> <li>■ <b>KMC-45</b> Speaker Microphone</li> <li>■ <b>KMC-21</b> Compact Speaker Microphone</li> <li>■ <b>KHS-1</b> Headset with VOX/PTT</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>KHS-7/7A</b> Single-Muff Headset</li> <li>■ <b>KHS-8BL/BE</b> 2-Wire Palm Microphone (Black/Beige)</li> <li>■ <b>KHS-9BL/BE</b> 3-Wire Lapel Microphone with Earphone (Black/Beige)</li> <li>■ <b>KHS-10-BH/-OH</b> Noise-Reduction Headset with Noise-Cancelling Microphone</li> <li>■ <b>KHS-21</b> Headset</li> <li>■ <b>KHS-23</b> 2-Wire Palm Microphone</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>KHS-29F</b> Clip Microphone with Earhanger</li> <li>■ <b>EMC-7</b> Clip Microphone with Earhanger &amp; PTT</li> <li>■ <b>KEP-2</b> Earphone Kit (2.5 mm plug)</li> <li>■ <b>KWR-1</b> Water Resistant Bag</li> <li>■ <b>KBH-10</b> Belt Clip</li> </ul>
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All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

## Specifications

	TK-2312	TK-3312		TK-2312	TK-3312
<b>GENERAL</b>			<b>RECEIVER</b>		
Frequency Range	136 - 174 MHz	400 - 470 MHz	Sensitivity (Wide / Wide 4K / Narrow)	0.25 µV / 0.25 µV / 0.28 µV	
Number of Channels / Zones	128 / 128		EIA 12dB SINAD	-3 dB µV (0.35 µV) / -3 dB µV (0.35 µV) / -2 dB µV (0.40 µV)	
Channel Spacing	25 kHz / 20 kHz / 12.5 kHz		EN 20dB SINAD	-3 dB µV (0.35 µV) / -3 dB µV (0.35 µV) / -2 dB µV (0.40 µV)	
Operating Voltage	7.5 V DC ±20 %		Adjacent Channel Selectivity	Wide / Wide 4K / Narrow	
Battery Life (5-5-90 duty cycle, save off / on)			Wide / Wide 4K / Narrow	70 dB / 70 dB / 62 dB	
with KNB-45L (2000 mAh)	Approx. 12 hours / Approx. 18 hours		Intermodulation	Wide / Wide 4K / Narrow	
with KNB-53N (1400 mAh)	Approx. 9 hours / Approx. 12 hours		Wide / Wide 4K / Narrow	67 dB	
with KNB-29N (1500 mAh)	Approx. 10 hours / Approx. 14 hours		Spurious Response Rejection	70 dB	
Operating Temperature Range	-30°C ~ +60°C		Audio Distortion	Less than 5 %	
Frequency Stability	±2.5 ppm (-30°C ~ +60°C)		Audio Output	500 mW / 8 Ω	
Antenna Impedance	50 Ω		<b>TRANSMITTER</b>		
Dimensions (W x H x D), Projections not Included			RF Output Power (High / Low)	5W / 1W	
Radio only	54 x 122 x 21 mm		Modulation Limiting	±5.0 kHz at 25 kHz	
with Battery	54 x 122 x 33.7 mm			±4.0 kHz at 20 kHz	
Weight (net)				±2.5kHz at 12.5 kHz	
Radio only	Approx. 180 g		Spurious Emission	-36 dBm ≤1 GHz, -30 dBm >1 GHz	
with KNB-45L	Approx. 300 g		FM Noise (EIA)	Wide / Wide 4K / Narrow	
with KNB-53N	Approx. 365 g		Wide / Wide 4K / Narrow	45 dB / 45 dB / 40 dB	
with KNB-29N	Approx. 380 g		Modulation Distortion	Less than 3 %	
Applicable Standards			Microphone Impedance	1.8 kΩ	
ETSI R&TTE	EN 300 086, EN 300 113, EN 300 219, EN 301 489		Modulation	16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D	
ETSI Safety	EN 60065, EN 60950-1, EN 60215				

Analogue measurements made per EN Standards and specifications shown are typical. Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice.

FleetSync® is a registered trademark of Kenwood Corporation.

## Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
<b>Low Pressure</b>	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
<b>High Temperature</b>	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II	501.5/Procedure I, II
<b>Low Temperature</b>	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
<b>Temperature Shock</b>	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
<b>Solar Radiation</b>	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
<b>Rain</b>	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III	506.5/Procedure I, III
<b>Humidity</b>	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Procedure II
<b>Salt Fog</b>	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
<b>Dust</b>	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
<b>Vibration</b>	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
<b>Shock</b>	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV
<b>International Protection Standard</b>					
<b>Dust &amp; Water Protection</b>	IP54 / 55				

## Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

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